IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Before the Board of Patent Appeals and Interferences

Inventor:	Jurgen Schmidt
Application No.:	10/563,709
Filed:	January 6, 2006
Title:	Method and Apparatus for Decoding a Data Stream In Audio Video Streaming Systems
Examiner:	Mohammad N. Rahman
Art Unit:	2161

APPEAL BRIEF

May It Please The Honorable Board:

Appellants reinstate an appeal in accordance with 37 CFR 41.31 in response to the Rejection, dated January 30, 2009, of claims 1-12 of the above-identified application. The fee of five hundred forty dollars ($540.00) for filing this Brief pursuant to 37 CFR 41.20(b)(2) has already been applied in the previous appeal. Since appeal fees have increased since the previous fee was paid, the difference of thirty dollars ($30.00) for filing this Brief has been charged with the Notice of Appeal. Enclosed is a single copy of this Brief.

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Appellants do not request an oral hearing.

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I. REAL PARTY IN INTEREST

The real party in interest of Application Serial No. 10/563,709 is the Assignee of record:

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II. RELATED APPEALS AND INTERFERENCES

There are currently, and have been, no related Appeals or Interferences regarding Application Serial No. 10/563,709.

III. STATUS OF THE CLAIMS

Claims 1-12 are rejected and the rejection of claims 1-12 is appealed.

IV. STATUS OF AMENDMENTS

All amendments were entered and are reflected in the claims included in Appendix I.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 provides a method for decoding a data stream containing a first and second substream (Fig. 1, page 4, lines 1-5). The first substream contains first and second multimedia data packets (Fig. 1, page 4, lines 5-12) and the second substream contains control information (Fig. 2, page 4, lines 17-22. The multimedia data packets contain an indication of the time when to be presented (Fig. 2, page 4, lines 17-22) and are decoded prior to their indicated presentation time (Page 4, lines 22-24). First, second and third control data is extracted from the control information of the second substream. The first control data are suitable for defining buffer size to be allocated (Page 5, lines 4-20). The second control data are suitable for defining one or more second multimedia data packets to be buffered (Page 5, lines 4-20). The third control data are suitable for defining a mode for buffering the second multimedia data packets (Page 5, lines 4-20). Buffer size is allocated according to the first control data in a buffer (Page 5, lines 29-30). The first decoded multimedia data packets are stored in the buffer (Page 5,

lines 14-18). One or more multimedia data packets are stored according to the second control data in the buffer (Page 5, lines 30-34). Depending on the third control data, either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or some or all of the first decoded multimedia data packets in the buffer are replaced (Page 6, lines 1-5).

Dependent claim 2 includes all the features of claim 1, along with a third control data defining one of a plurality of operation modes (Page 6, lines 1-2). In a first mode, buffering of multimedia data packets is performed when the value of the first control data changes (Page 6, lines 7-10). In a second and third mode, the second control data are valid to specify the multimedia data packets to be buffered (Page 6, lines 11-12). In the second mode, the multimedia data packets replace the buffer contents and in the third mode, the multimedia data packets are appended to the buffer contents (Page 6, lines 14-25).

Dependent claim 3 includes all the features of claim 2, along with a third mode having two variations. In the first variation, the buffering of multimedia data packets stops when the buffer is full (Page 6, lines 27-34). In the second variation, previously buffered data may be overwritten when the buffer is full (Page 7, lines 1-9).

Dependent claim 4 includes all the features of claims 1, along with a method being utilized in an instance of a processing node. The first control data (Length) defines the allocated buffer size at node creation time (Page 6, lines 27-34).

Dependent claim 5 includes all the features of claims 1, along with labels being attached to the buffered first and other multimedia data packets, and the packets may be accessed through their respective label (Page 7, lines 1-14).

Dependent claim 6 includes all the features of claims 5, along with label attached to the buffered data packets containing an index relative to the latest received data packet (Page 7, lines 16-21).

Dependent claim 7 includes all the features of claim 1, along with the first substream containing audio data and the second substream contains a description of the presentation (Page 8, lines 10-23).

Independent claim 8 provides an apparatus for decoding a data stream containing a first and second substream (Fig. 1, page 4, lines 1-5). The first substream contains first and second multimedia data packets (Fig. 1, page 4, lines 5-12) and the second substream contains control information where the multimedia data packets contain an indication of the time when to be presented. (Fig. 2, page 4, lines 17-22). The multimedia data packets are decoded prior to their indicated presentation time (Page 4, lines 22-24). The first, second and third control data is extracted from the control information of the second substream. The first control data is suitable for defining allocation of buffer size (Page 5, lines 4-20). The second control data is suitable for defining one or more second multimedia data packets to be buffered (Page 5, lines 4-20). The third control data is suitable for defining a mode for buffering the second multimedia data packets (Page 5, lines 4-20). Buffer size according to the first control data is allocated in a buffer (Page 5, lines 29-30). The first decoded multimedia data packets are stored in the buffer (Page 5, lines 14-18). One or more multimedia data packets are stored according to the second control data in the buffer (Page 5, lines 30-34). Depending on the third control data, either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or some or all of the first decoded multimedia data packets in the buffer are replaced (Page 6, lines 1-5).

Dependent claim 9 includes all the features of claim 8, including attaching labels to the buffered multimedia data packets, and means for accessing, retrieving or deleting the packets through their respective label (Page 7, lines 1-21).

Dependent claim 10 includes all the features of claim 8, along with the data stream being an MPEG-4 compliant data stream (Page 8, lines 10-24).

Dependent claim 11 includes all the features of claim 1, along with replacing the stored first decoded multimedia packets with the second multimedia data packets further comprises the step of clearing the buffer before storing the second multimedia data packets (Page 7, lines 1-9).

Dependent claim 12 includes all the features of claims 8, along with the third control data defining one of a plurality of operation modes (Page 6, lines 1-2). In a first mode, buffering of multimedia data packets is performed when the value of the first control data changes (Page 6, lines 7-10). In a second and third mode, the second control data are valid to specify the multimedia data packets to be buffered (Page 6, lines 11-12). In the second mode, the multimedia data packets replace the buffer contents and in the third mode, the multimedia data packets are appended to the buffer contents (Page 6, lines 14-25).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-12 are rejected under 35 U.S.C. § 103(a) as being obvious Fujinami et. al. (U.S. 5,502,573), hereinafter "Fujinami" in view of "Information technology – Coding of audio-visual objects, March 2002," hereinafter "Coding of audio-visual objects."

VII. ARGUMENT

Overview of the Cited References

Fujinami describes an apparatus for reproducing video data from a record medium on which is recorded, in multiplexed form, video data, reference time data representing a reference time, and video time data representing the time at which decoding of the video data reproduced from the record medium should begin. The reference time data is separated from the reproduced multiplexed data and used to generate timing data. The video data and video time data are temporarily stored in a video buffer and a video time data extractor is connected to the output of the video buffer to extract the video time data from the contents of the video buffer. T he video buffer also is connected to a video decoder which decodes the video data temporarily stored in the video buffer, the operation of the video decoder being controlled as a function of a

comparison between the generated timing data and the extracted video time data (col. 6, lines 35-49).

The publication, Coding of audio-visual objects, describes a system for the communication of interactive audio-visual scenes. At the sending terminal, the audio-visual scene information is compressed, supplemented with synchronization information and passed on to a delivery layer that multiplexes into one or more coded binary streams that are transmitted or stored. At the receiving terminal, these streams are demultiplexed and decompressed. The audio-visual objects are composed according to the scene description and synchronization information and presented to the end user. The end user may have the option to interact with this presentation. Interaction information can be processed locally or transmitted back to the sending terminal. Syntax and semantics of the bitstreams that convey the scene information, as well as details of their decoding processes are defined (page xi, lines 3-4, and lines 17-23).

Rejection of claims 1-7, and 11 under 35 U.S.C. 102(b)

Reversal of the rejection of claims 1-12 under 35 U.S.C. § 103(a) as being obvious over Fujinami et. al. (U.S. 5,502,573) in view of "Information technology – Coding of audio-visual objects, March 2002," hereinafter "Coding of audio-visual objects" is respectfully requested because the rejection makes crucial errors in interpreting the cited references. The rejection erroneously states that claims 1-12 are obvious over Fujinami and Coding of audio-visual objects.

CLAIMS 1 AND 4-7

Independent claim 1 provides a method for decoding a data stream containing a first and second substream. The first substream contains first and second multimedia data packets and the second substream contains control information. The multimedia data packets contain an indication of the time when to be presented and are decoded prior to their indicated presentation time. First, second and third control data is extracted from the control information of the second substream. The first control data is suitable for defining allocation of buffer size. The second control data is suitable for defining one or more second multimedia data packets to be buffered.

The third control data is suitable for defining a mode for buffering the second multimedia data packets. Buffer size according to the first control data is allocated in a buffer. The first decoded multimedia data packets are stored in the buffer. One or more multimedia data packets are stored according to the second control data in the buffer. Depending on the third control data, either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or some or all of the first decoded multimedia data packets in the buffer are replaced.

The Office Action asserts that Fujinami describes "storing one or more multimedia data packets according to the second control data in the buffer, wherein depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer" as recited in claim 1 of the present arrangement. Applicant respectfully disagrees. The Office Action cites col. 11, lines 66-67, col. 12, lines 1-19, and col. 13, lines 29-41 of Fujinami to show that the system of Fujinami replaces some or all of the first decoded multimedia packets in the buffer. However, the Office Action has misinterpreted the reference. Fujinami instead describes how to proceed when the extracted video decoding time stamp DTSV and the generated timing data STC do not match, for example, due to a synchronization error. This is done by supplying a "wait" signal to the video decoder, "thereby delaying for one picture interval the decoding of the video data stored in the video buffer 6A" (col. 12, lines 11-12). Thus, unlike the present claimed arrangement, no decoded multimedia data are replaced or appended in a buffer. This is contrary to the present claimed arrangement in which "depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replaces some or all of the first decoded multimedia data packets in the buffer." In addition, Fujinami only describes that in the aforementioned synchronization process, the presentation time stamp PTS may be used instead of the decoding time stamp DTSV, since it is equivalent (col. 13, lines 29-41). However, this is also unlike the claimed feature of "depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replaces some or all of the first decoded multimedia data packets in the buffer."

In addition, the video buffer of Fujinami is located after the data separator and decoder. The presentation time stamp (PTS) (col. 13, lines 28-41) also only refers to either the video signal or the audio signal, which in turn means it is evaluated after the data separator and the decoding. Col. 15 lines 4-14 of Fujinami describes that "the video decoder 7 waits for a control signal from the synchronization control circuit 31, thereby delaying the decoding of video data supplied from the video buffer 6A, and the decoder 7 while waiting repeatedly outputs the previous picture P12," and thus, previous picture P12 must be stored in this buffer within the decoder, independent from the control data because at the time of generation, the decoder will not have any indication whether or not the next picture will be delivered form the video buffer or if a pause operation will follow, which would lead to previous picture P12 being output repeatedly. Furthermore, the synchronization control circuit 31 that controls video decoder 7 is distinguishable from the control circuit 28. Thus, Fujinami neither discloses nor suggests "storing one or more multimedia data packets according to the second control data in the buffer, wherein depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer" as recited in claim 1 of the present arrangement.

The Office Action concedes that Fujinami neither discloses nor suggests "extracting from said control information of the second substream first, second and third control data wherein the first control data are suitable for defining buffer size to be allocated, the second control data are suitable for defining one or more second multimedia data packets to be buffered, and the third control data are suitable for defining a mode for buffering the second multimedia data packets; allocating, in a buffer, buffer size according to the first control data (Length); storing the first decoded multimedia data packets in the buffer" as recited in claim 1 of the present arrangement. However, the Office Action asserts that Coding of audio-visual objects describes the aforementioned features. Applicant respectfully disagrees.

The present claimed arrangement addresses the problem of an 'audioBuffer' node that can "only be loaded with data from the audio substream when the node is created, or when the 'length' field is changed" (page 2, lines 19-21). A conventional functioning of the 'audioBuffer'

node based on only the 'length' field may generate problems, which are alleviated in the present claimed arrangement through the second control data "suitable for defining one or more second multimedia data packets to be buffered" and the third control data "suitable for defining a mode for buffering the second multimedia packets." While, the length field of Coding of audio-visual objects "specifies the length in seconds of the audio buffer," Coding of audio-visual objects does not show either implicitly or explicitly that "the second control data are suitable for defining one or more second multimedia data packets to be buffered, and the third control data are suitable for defining a mode for buffering the second multimedia data packets" as recited in claim 1 of the present arrangement. In contrast, the present claimed arrangement provides a length field corresponding to first control data. The present claimed arrangement starts at this point, while the system described in Coding of audio-visual objects does not. Thus, Coding of audio-visual objects neither discloses nor suggests "extracting from said control information of the second substream first, second and third control data wherein...the second control data are suitable for defining one or more second multimedia data packets to be buffered, and the third control data are suitable for defining a mode for buffering the second multimedia data packets" as recited in claim 1 of the present arrangement.

In addition, Coding of audio-visual objects, like Fujinami, neither discloses nor suggests "storing one or more multimedia data packets according to the second control data in the buffer, wherein depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer" as recited in claim 1 of the present arrangement because Coding of audio-visual objects is silent with regard to this feature.

Additionally, a combination of Fujinami and Coding of audio-visual objects, similar to the individual systems, also neither discloses nor suggests "storing one or more multimedia data packets according to the second control data in the buffer, wherein depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer...extracting from said control information of the second substream first, second and third control data wherein...the second control data are suitable for defining one or more second

multimedia data packets to be buffered, and the third control data are suitable for defining a mode for buffering the second multimedia data packets" as recited in claim 1 of the present arrangement. A combination of Fujinami and Coding of audio-visual objects would only produce a system that can reproduce video data in multiplexed form using a traditional buffer to temporarily store data. The combined system would not disclose or suggest "second control data...suitable for defining one or more second multimedia data packets to be buffered" and "third control data...suitable for defining a mode for buffering the second multimedia data packets" as recited in claim 1 of the present arrangement. In addition, as a result of not disclosing or suggesting "second control data" and "third control data," the combined system also neither discloses nor suggests that "depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer as recited in claim 1. Thus, the combination of Fujinami and Coding of audio-visual objects neither discloses nor suggests "storing one or more multimedia data packets according to the second control data in the buffer, wherein depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer...extracting from said control information of the second substream first, second and third control data wherein...the second control data are suitable for defining one or more second multimedia data packets to be buffered, and the third control data are suitable for defining a mode for buffering the second multimedia data packets" as recited in claim 1 of the present arrangement. Consequently, it is respectfully submitted that the rejection to claim 1 is satisfied and should be withdrawn.

Claims 4-7 are dependent on claim 1 and are considered patentable for the reasons discussed above with respect to claim 1. Consequently, it is respectfully submitted that the rejection to claims 4-7 is satisfied and should be withdrawn.

CLAIM 2

Claim 2 is dependent on claim 1 and is considered patentable for the reasons discussed above with respect to claim 1. Claim 2 is further considered patentable as Coding of audio-visual objects (with Fujinami), neither discloses nor suggests "a plurality of operation modes,

wherein in a second and third mode the second control data are valid for specifying the multimedia data packets to be buffered, wherein in the second mode the multimedia data packets replace the buffer contents and in the third mode the multimedia data packets are appended to the buffer contents" as recited in claim 2 of the present arrangement. The Office Action asserts that Coding of audio-visual objects (with Fujinami) describes the aforementioned features at pg 151, lines 13-46, page 152, lines 3-25 and lines 29-43, and pages 153, lines 32-37. However, Coding of audio-visual objects (with Fujinami), makes no mention or suggestion of "a plurality of operation modes, wherein in a second and third mode the second control data are valid for specifying the multimedia data packets to be buffered, wherein in the second mode the multimedia data packets replace the buffer contents and in the third mode the multimedia data packets are appended to the buffer contents" as recited in claim 2 of the present arrangement. Instead, Coding of audio-visual objects discusses the components of an audio-visual object without providing a description of corresponding operation modes. Therefore, Coding of audio-visual objects (with Fujinami), neither discloses nor suggests "a plurality of operation modes, wherein in a second and third mode the second control data are valid for specifying the multimedia data packets to be buffered, wherein in the second mode the multimedia data packets replace the buffer contents and in the third mode the multimedia data packets are appended to the buffer contents" as recited in claim 2 of the present arrangement. Consequently, it is respectfully submitted that the rejection to claim 2 is satisfied and should be withdrawn.

CLAIM 3

Claim 3 is dependent on claim 1 and is considered patentable for the reasons discussed above with respect to claim 1. Claim 3 is further considered patentable as Fujinami neither discloses nor suggests "in the first variation the buffering of multimedia data packets stops when the buffer is full, and in the second variation previously buffered data may be overwritten when the buffer is full" as recited in claim 3 of the present arrangement. The Office Action asserts that Fujinami describes the aforementioned feature. However, the cited portion of Fujinami only describes the capacity of the buffer and what happens when there is a buffer overflow and underflow. There is no mention of a variation of the mode where previously buffered data may be overwritten when the buffer is full, as described in the present claimed arrangement. Therefore, Fujinami neither discloses nor suggests "in the first variation the buffering of

multimedia data packets stops when the buffer is full, and in the second variation previously buffered data may be overwritten when the buffer is full" as recited in claim 3 of the present arrangement. Coding of audio-visual objects, similarly to Fujinami, only describes accessing of certain bytes in a payload. This is not the same as "buffering of multimedia data packets when the buffer is full" and "previously buffered data may be overwritten when the buffer is full. The combination of Fujinami and Coding of audio-visual objects, similar to the individual systems, likewise neither discloses nor suggests "in the first variation the buffering of multimedia data packets stops when the buffer is full, and in the second variation previously buffered data may be overwritten when the buffer is full" as recited in claim 3 of the present arrangement. Consequently, it is respectfully submitted that the rejection to claim 3 is satisfied and should be withdrawn.

CLAIMS 8-12

Independent claim 8 provides an apparatus for decoding a data stream. The data stream contains a first and a second substream. The first substream contains first and second multimedia data packets. The second substream contains control information. The multimedia data packets contain an indication of the time when to be presented and are decoded prior to their indicated presentation time. The first and second multimedia data packets are buffered. Control information of the first, second and third control data are extracted from the second substream. The first control data is suitable for defining the buffer size to be allocated. The second control data is suitable for defining one or more second multimedia data packets to be buffered. The third control data is suitable for defining a mode for buffering the second multimedia data packets. In a buffer, buffer size is allocated according to the first control data. The first decoded multimedia data packets are stored in the buffer. One or more multimedia data packets may be stored according to the second control data in the buffer. Depending on the third control data, either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer or some or all of the first decoded multimedia data packets in the buffer are replaced.

The Office Action asserts that Fujinami describes "means for storing one or more multimedia data packets according to the second control data in the buffer, wherein depending

on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer" as recited in claim 8 of the present arrangement. Applicant respectfully disagrees. The Office Action cites col. 11, lines 66-67, col. 12, lines 1-19, and col. 13, lines 29-41 of Fujinami to show that the system of Fujinami replaces some or all of the first decoded multimedia packets in the buffer. However, the Office Action has misinterpreted the reference. Fujinami instead describes how to proceed when the extracted video decoding time stamp DTSV and the generated timing data STC do not match, for example, due to a synchronization error. This is done by supplying a "wait" signal to the video decoder, "thereby delaying for one picture interval the decoding of the video data stored in the video buffer 6A" (col. 12, lines 11-12). Thus, unlike the present claimed arrangement, no decoded multimedia data are replaced or appended in a buffer. This is contrary to the present claimed arrangement in which "depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replaces some or all of the first decoded multimedia data packets in the buffer." In addition, Fujinami only describes that in the aforementioned synchronization process, the presentation time stamp PTS may be used instead of the decoding time stamp DTSV, since it is equivalent (col. 13, lines 29-41). However, this is also unlike the claimed feature of "depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replaces some or all of the first decoded multimedia data packets in the buffer."

In addition, the video buffer of Fujinami is located after the data separator and decoder. The presentation time stamp (PTS) (col. 13, lines 28-41) also only refers to either the video signal or the audio signal, which in turn means it is evaluated after the data separator and the decoding. Col. 15 lines 4-14 of Fujinami describes that "the video decoder 7 waits for a control signal from the synchronization control circuit 31, thereby delaying the decoding of video data supplied from the video buffer 6A, and the decoder 7 while waiting repeatedly outputs the previous picture P12." Thus, previous picture P12 must be stored in this buffer within the decoder, independent from the control data because at the time of generation, the decoder will not have any indication whether or not the next picture will be delivered form the video buffer or

if a pause operation will follow, which would lead to previous picture P12 being output repeatedly. Furthermore, the synchronization control circuit 31 that controls video decoder 7 is distinguishable from the control circuit 28. Thus, Fujinami neither discloses nor suggests "storing one or more multimedia data packets according to the second control data in the buffer, wherein depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer" as recited in claim 8 of the present arrangement.

The Office Action concedes that Fujinami neither discloses nor suggests "means for extracting from said control information of the second substream first, second and third control data wherein the first control data are suitable for defining buffer size to be allocated, the second control data are suitable for defining one or more second multimedia data packets to be buffered, and the third control data are suitable for defining a mode for buffering the second multimedia data packets; means for allocating, in the buffer, buffer size according to the first control data (Length); means for storing the first decoded multimedia data packets in the buffer" as recited in claim 8 of the present arrangement. However, the Office Action asserts that Coding of audio-visual objects describes the aforementioned features. Applicant respectfully disagrees.

The present claimed arrangement addresses the problem of an 'audioBuffer' node that can "only be loaded with data from the audio substream when the node is created, or when the 'length' field is changed" (page 2, lines 19-21). A conventional functioning of the 'audioBuffer' node based on only the 'length' field may generate problems, which are alleviated in the present claimed arrangement through the second control data "suitable for defining one or more second multimedia data packets to be buffered" and the third control data "suitable for defining a mode for buffering the second multimedia packets." While, the length field of Coding of audio-visual objects "specifies the length in seconds of the audio buffer," Coding of audio-visual objects does not show either implicitly or explicitly that "the second control data are suitable for defining one or more second multimedia data packets to be buffered, and the third control data are suitable for defining a mode for buffering the second multimedia data packets" as recited in claim 1 of the present arrangement. In contrast, the present claimed arrangement provides a length field

corresponding to first control data. The present claimed arrangement starts at this point, while the system described in Coding of audio-visual objects does not. Thus, Coding of audio-visual objects neither discloses nor suggests "means for extracting from said control information of the second substream first, second and third control data wherein…the second control data are suitable for defining one or more second multimedia data packets to be buffered, and the third control data are suitable for defining a mode for buffering the second multimedia data packets" as recited in claim 1 of the present arrangement.

In addition, Coding of audio-visual objects, like Fujinami, neither discloses nor suggests "means for storing one or more multimedia data packets according to the second control data in the buffer, wherein depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer" as recited in claim 8 of the present arrangement, as Coding of audio-visual objects is silent with regards to this feature.

Additionally, a combination of Fujinami and Coding of audio-visual objects, similar to the individual systems, also neither discloses nor suggests "means for extracting from said control information of the second substream first, second and third control data wherein…the second control data are suitable for defining one or more second multimedia data packets to be buffered, and the third control data are suitable for defining a mode for buffering the second multimedia data packets…means for storing one or more multimedia data packets according to the second control data in the buffer, wherein depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer" as recited in claim 8 of the present arrangement. A combination of Fujinami and Coding of audio-visual objects would only produce a system that can reproduce video data in multiplexed form using a traditional buffer to temporarily store data. The combined system would not disclose or suggest "second control data…suitable for defining one or more second multimedia data packets to be buffered" and "third control data…suitable for defining a mode for buffering the second multimedia data packets" as recited in claim 8 of the present arrangement. In addition, as a result of not disclosing or suggesting "second control data" and "third control data," the

combined system also neither discloses nor suggests that "depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer as recited in claim 1. Thus, the combination of Fujinami and Coding of audio-visual objects neither discloses nor suggests "means for extracting from said control information of the second substream first, second and third control data wherein...the second control data are suitable for defining one or more second multimedia data packets to be buffered, and the third control data are suitable for defining a mode for buffering the second multimedia data packets...means for storing one or more multimedia data packets according to the second control data in the buffer, wherein depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer" as recited in claim 8 of the present arrangement. Consequently, it is respectfully submitted that the rejection to claim 8 is satisfied and should be withdrawn.

Claims 9-12 are dependent on claim 8 and are considered patentable for the reasons discussed above with respect to claim 8. Consequently, it is respectfully submitted that the rejection to claims 9-12 is satisfied and should be withdrawn.

VIII CONCLUSION

Fujinami does not disclose or suggest "extracting from said control information of the second substream first, second and third control data wherein the first control data are suitable for defining one or more second multimedia data packets to be buffered, and the third control data are suitable for defining a mode for buffering the second multimedia data packets; allocating, in a buffer, buffer size according to the first control data (Length); storing the first decoded multimedia data packets in the buffer; and storing one or more multimedia data packets according to the second control data in the buffer, wherein depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer" as recited in claim 1 of the present arrangement.

Coding of audio-visual objects does not disclose or suggest "extracting from said control information of the second substream first, second and third control data wherein the first control data are suitable for defining one or more second multimedia data packets to be buffered, and the third control data are suitable for defining a mode for buffering the second multimedia data packets…and storing one or more multimedia data packets according to the second control data in the buffer, wherein depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer" as recited in claim 1 of the present arrangement.

The combination of Fujinami and Coding of audio-visual objects, similar to the individual systems, does not disclose or suggest "extracting from said control information of the second substream first, second and third control data wherein the first control data are suitable for defining one or more second multimedia data packets to be buffered, and the third control data are suitable for defining a mode for buffering the second multimedia data packets…and storing one or more multimedia data packets according to the second control data in the buffer, wherein depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer" as recited in claim 1 of the present arrangement.

Accordingly it is respectfully submitted that the rejection of claims 1-12 should be reversed.

Respectfully submitted,
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APPENDIX I - APPEALED CLAIMS

1. (Rejected) Method for decoding a data stream, containing a first and a second substream, the first substream containing first and second multimedia data packets and the second substream containing control information, wherein the multimedia data packets contain an indication of the time when to be presented and are decoded prior to their indicated presentation time, the method comprising the steps of:

extracting from said control information of the second substream first, second and third control data wherein

the first control data are suitable for defining buffer size to be allocated,

the second control data are suitable for defining one or more second multimedia data packets to be buffered, and

the third control data are suitable for defining a mode for buffering the second multimedia data packets;

allocating, in a buffer, buffer size according to the first control data (Length);

storing the first decoded multimedia data packets in the buffer; and

storing one or more multimedia data packets according to the second control data in the buffer, wherein depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer.

2. (Rejected) Method according to claim 1, wherein the third control data defines one of a plurality of operation modes, wherein in a first mode buffering of multimedia data packets is performed when the value of the first control data changes, and in a second and third mode the second control data are valid for specifying the multimedia data packets to be buffered, wherein in the second mode the multimedia data packets replace the buffer contents and in the third mode the multimedia data packets are appended to the buffer contents.

3. (Rejected) Method according to claim 2, wherein the third mode has two variations, wherein in the first variation the buffering of multimedia data packets stops when the buffer is full, and in the second variation previously buffered data may be overwritten when the buffer is

full.

4. (Rejected) Method according to claim 1, wherein the method is utilized in an instance of a processing node and wherein the first control data defines the allocated buffer size at node creation time.

5. (Rejected) Method according to claim 1, wherein labels are attached to the buffered first and other multimedia data packets, and the packets may be accessed through their respective label.

6. (Rejected) Method according to the claim 5, wherein a label attached to the buffered data packets contains an index relative to the latest received data packet.

7. (Rejected) Method according to claim 1, wherein the first substream contains audio data and the second substream contains a description of the presentation.

8. (Rejected) Apparatus for decoding a data stream, the data stream containing a first and a second substream, the first substream containing first and second multimedia data packets and the second substream containing control information, wherein the multimedia data packets contain an indication of the time when to be presented and are decoded prior to their indicated presentation time, and wherein the first and second multimedia data packets are buffered, comprising

buffering means for said buffering of the first and the second multimedia data packets;

means for extracting from said control information of the second substream first, second and third control data, wherein the first control data are suitable for defining buffer size to be allocated,

the second control data are suitable for defining one or more second multimedia data packets to be buffered, and

the third control data are suitable for defining a mode for buffering the second a multimedia data packets;

means for allocating, in the buffer, buffer size according to the first control data;

means for storing the first decoded multimedia data packets in the buffer; and

means for storing one or more multimedia data packets according to the second control data in the buffer, wherein depending on the third control data either the second multimedia data packets are appended to the first decoded multimedia data packets in the buffer, or replace some or all of the first decoded multimedia data packets in the buffer.

9. (Rejected) Apparatus according to claim 8, further comprising means for attaching labels to the buffered multimedia data packets, and means for accessing, retrieving or deleting the packets through their respective label.

10. (Rejected) Apparatus according to claim 8, wherein the data stream is an MPEG-4 compliant data stream.

11. (Rejected) Method according to claim 1, wherein replacing the stored first decoded multimedia packets with the second multimedia data packets further comprises the step of clearing the buffer before storing the second multimedia data packets.

12. (Rejected) Apparatus according to claim 8, wherein the third control data defines one of a plurality of operation modes, wherein in a first mode buffering of multimedia data packets is performed when the value of the first control data changes, and in a second and third mode the second control data are valid for specifying the multimedia data packets to be buffered, wherein in the second mode the multimedia data packets replace the buffer contents and in the third mode the multimedia data packets are appended to the buffer contents.

APPENDIX II - EVIDENCE

Applicant does not rely on any additional evidence other than the arguments submitted hereinabove.

APPENDIX III - RELATED PROCEEDINGS

Applicant respectfully submits that there are no proceedings related to this appeal in which any decisions were rendered.

APPENDIX IV - TABLE OF CASES

APPENDIX V - LIST OF REFERENCES

U.S. Pub. No.	Pub. Date	102(e) Date	Inventors
5,502,573	Mar. 26, 1996		Fujinami et al
ISO/IEC 14496-1	March, 2002		Coding of audio-visual objects

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